

NPIC ROUTING SLIP

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CIA-RDP78B05708A000500050011-2

FROM:

DATE:

5 MAY 1964

FOR YOUR

SIGNATURE

INFORMATION

COMMENTS

CONCURRENCE

APPROVAL

ACTION

SEE REMARKS BELOW

FILE

RETURN

SEE ME

STAT

TO

INITIALS

DATE

DIR

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DEP/DIR

STAT

EXEC/DIR

1

5/5

requested

ASST FOR OPS

to work out answers
to problems posed
and report same
to [redacted] 5/5/64

ASST FOR ADMIN

ASST FOR P&D

STAT

CH/CSD

O/D File

CH/PSD

CH/PD

STAT

CH/TID

CH/PAD

SIO/CIA (PID)

SIO/ARMY

STAT

SIO/NAVY

SIO/AF

LO/DIA

LO/NSA

REMARKS:

Photo: General

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TCS 1999-64/KH

5 May 1964

Copy 1

MEMORANDUM FOR: Executive Director, NPIC

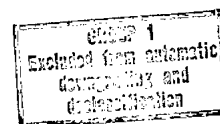
SUBJECT : Expansion and Additional Applications of the Photomosaic Plotting Program

Since the initiation of the Photomosaic Plotting Program, representatives of various intelligence related military and civilian organizations have indicated extreme interest in the project. This program has been exhibited for NPIC tours and at the PID County Fair. In addition, some visitors have suggested possible modifications to adapt our system to their own particular needs.

The present system was designed to satisfy NPIC needs and represents a significant departure from previous methods of handling references to photography. The program is a CSD modification of the idea presented in employee suggestion, TCS 1366-63/KH, dated 18 April 1963. In essence, the initial suggestion incorporated the following proposals:

- a. Apply AMS photomosaic plots to WAC charts.
- b. Reproduce these WAC/mosaics as 8" by 10" negatives.
- c. Print in any desired format, but principally 8" by 10" contact size.
- d. Compile notebooks by WAC in mission order for use by photo interpreters as a reference aid.
- e. Apply the system to Minicard.

The suggestion as outlined above was rejected by several divisions affected. (See evaluation of TCS 1366-63/KH.) However, CSD personnel felt that the suggestion had potential for the Minicard system and for computer application. A staff study (TCS 4453-63/KH, dated 26 September 1963) proposing this method was submitted and tentatively approved by the Operations Board, pending the results of a working test of the system. On 22 January 1964, at Operations Board Meeting No. 31, the test results were reviewed, and the recommendations made by the Chief, CSD were formally approved, and the project was initiated. The CSD concept is as follows:

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TCS 1999-64/KH

Page 2

- a. AMS photomosaic plots are applied to WAC charts.
- b. AMS photomosaic/WAC plots are coded for Minicard input, including geographic coordinates, mission number, pass number, mission date, WAC number, and NPIC film can control numbers.
- c. Key punched cards and tapes containing this coded information are input into 1401 and 490 computers. The photomosaics and the coded information are filmed to produce minicard chips.
- d. Through machine retrieval methods both listings and/or reproductions are made available to those requesting photo references for specific targets or locations. This same information can be made available in rolls of 16mm film or 16mm film chips.

Thus, it must be emphasized that this system as proposed by CSD is a photographic reference facility, and the reproductions are not designed to be used for photo interpretation.

As the program has developed, outside interest has increased. Direct aid from NPIC in adapting our Photomosaic Plotting Program would be welcomed by the intelligence community and would eliminate the need for components of the community to duplicate this effort. If NPIC is to meet these needs, policy decisions must be made regarding the following questions:

1. Would the Center consider sponsoring a meeting to explain our Photomosaic Plotting Program to representatives of all the interested intelligence organizations?
2. Would the Center consider photographing the photomosaic plots on 35mm, 70mm, and 100mm film and on various types of film?
3. Would the Center disseminate and control copies of this film, as well as machine listings?
4. Would the Center reproduce the materials to meet specialized needs of requestors, e.g., Acti-film for use on aircraft carriers?
5. Would the Center update all types of disseminated materials resulting from new missions received?
6. Would the Center provide all the additional personnel necessary for these services, or would the requesting organizations supply part of the personnel?
7. Would the Center extend the Photomosaic Plotting Program to the KH-7 and future systems?

TOP SECRET RUFF

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TCS 1999-64/KH

Page 3

8. Would the Center sponsor R & D work in order to develop further the present photomosaic system?

9. Would the Center supply all these services or rather make the originals of the photomosaic plots available to the requestors to use to satisfy their own needs?

According to NSCID 8, it would appear that NPIC is responsible for supplying photographic reference services to the entire intelligence community insofar as automated systems are concerned. Paragraph f of the subject document reads as follows:

f. The NPIC shall maintain on a selective basis a consolidated central file of photographic data as a service of common concern. It shall make arrangements for the exchange of photographs and photographic data with other photographic collections in the intelligence community, and shall make appropriate recommendations to facilitate the coordinated development of compatible codes, indexes, and mechanized systems for the efficient recovery, selection and collation of available photographic data.

Should the Center decide to provide these services several problems will arise. Those presently foreseen are as follows:

1. Making miniaturized plots of the whole KH-4 system available to all outside requesting organizations will create additional security control and handling problems.

2. Dissemination of Minicard film chips for machine storage and retrieval will be limited to those organizations having Minicard equipment. At present, only SAC and DIA Production Center possess this equipment. The dissemination of Minicard film records in 16mm reels or in aperture card form is technically unlimited.

3. Fulfilling the additional services will require additional personnel.

4. Modification of other systems to match our present system would be necessary, e.g., different components have different methods for numbering film cans. Our system references only NPIC film can control numbers.

5. The production of 35mm, 70mm, and 100mm film records for dissemination will probably require the modification of our present photo reproduction facility to include an assembly line procedure in order to process the existing 6000 plots.

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TCS 1999-64/KH

Page 4

6. Although the Photomosaic Plotting Program has been designed as a photographic reference system, it appears that some requestors would use the reproductions as photo interpretation tools (for road, rail, and terrain studies and for photo evaluation for maps and charts).

The Photomosaic Plotting Program represents a significant breakthrough in the art of referencing photography. So many other units have expressed interest that policy decisions on some of the problems outlined above are necessary.

The Assistant for Photographic Analysis has been apprised of some of the military overtures concerning the Photomosaic Plotting Program.

The Assistant for Operations has already held several meetings discussing the Photomosaic Plotting Program as related to NPIC and is cognizant of several inquiries made concerning the availability of this material.

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DINO A. BRUGIONIDeputy Chief, Collateral Support Division,
NPIC

Distribution:

Cy 1 & 2 - Exec. Dir./NPIC
3 - Chief, Ref/CSD/NPIC
4 & 5 - CSD/NPIC

TOP SECRET RUFF

FROM:

DATE: 9 May 64

STAT

	TO	INITIALS	DATE
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ASST FOR ADMIN			
ASST FOR OPS			
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REMARKS

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Attached are my
 comments on Dino's
 paper regarding the
 Photo Mosaic project.
 Again talked to
 re availability of
 personnel on 7 May
 & he promises support

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TOP

WORKING PAPERS

D R A F T

Re question 1, page 2

Obviously, the Center could sponsor such a meeting, but I think we must get on with the job and get it done before we attempt to sell the product. However, I don't think we'll need to sell the product, as it will sell itself. These plots are much like the target briefs - soon everyone in the community will have a copy.

Re question 2, page 2

I believe we must tell our potential customers that we will have these mosaic plots available in three formats; i. e., minicard chips or rolls (16 mm) and 70mm rolls. NPIC cannot afford to record these plots on every conceivable type of material, size and format in which it could be used by any component of the military since there is no compatability between handling systems. The 70 mm format provides a convenient base for enlargement back to original WAC sheet size.

Re question 3, page 2

Yes. It is intended that copies of the minicard chips be disseminated per agreement with DIA and SAC (as they have minicard systems). Other agencies could receive either 16mm minicard roll film or 70 mm film for use in standard 16 mm or Richardson viewers. The machine tabulations resulting from minicard input coding could also be disseminated in whatever arrangement required.

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KEYHOLE CHANNELS
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Re question 4, page 2

I don't believe the Center can afford to reproduce the mosaic plots to meet specialized needs of requesters. This would require specialized equipment which would not be compatible with anything else we are doing. I would rather recommend that the original WAC sheets be loaned to each requestor if necessary so they can be photographed for specialized handling systems.

Re question 5, page 2

Yes, as each new mission is plotted copies could be disseminated.

Re question 6, page 2

Rather ambiguous question as we don't feel that once we are caught up that extra personnel will be required. At present DIA Production Center has offered to assist us in the basic mosaic plotting exercise.

Re question 7, page 2

KH-7 does not lend itself to this plotting system. If future systems do, they obviously should be plotted in this manner if the system is as good as claimed.

Re question 8, page 3

Don't really understand this question. If, however, it implies that will we attempt to improve the system, we must obviously give consideration to this type of R&D.

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KEYHOLE CHANNELS
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Re question 9, page 3

Answered previously

Comments

Since, these materials are classified TOP SECRET RUFF control is essential. A special minicard control number has been assigned each sheet prior to input into the minicard system. This same control number can be used when recording these sheets on 70 mm film.

The Assistant for Photographic Analysis should not have been apprized of the "military overtures" concerning this program but rather the chief of DIAXX-4.

Other than meetings of the Operations Board, I have called together two meetings.

a. About one month ago a meeting was held with [redacted]

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[redacted] ~~was held~~ to discuss the scope and progress of the photo mosaic project after it was taken over by TID.

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The following points were made:

a. CSD was waiting for a large type typewriter for preparation of captions.

b. The 700 charts previously coded and inputted into the minicard system would require reworking as no satisfactory control number had been assigned each sheet. They, however, did not require recoding.

c. The question of recording these mosaic plots on 70 mm was discussed. It was decided to wait so that the need therefor could be determined.

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d. TID was pushed ^{to go} forward with the preparation of the mosaic plot sheets.

About two weeks ago, [] and I met to discuss this program further. I was concerned by the slow-up in production and rumors that DIA or CIA/ORR might undertake the project if we did not complete it. We agreed to the following:

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a. Since the large-type typewriter had arrived, CSD would keep a minimum of four people occupied in coding and inputing the mosaic sheets into the minicard system.

b. After the first 2000 sheets had been recorded in the minicard system, the minicards would be sorted by WAC chart by mission and a tabulation prepared. The WAC sheets would be arranged accordingly and then shot on 70 mm film.

c. Every effort would be made to get additional personnel assigned to the project to expedite all facets of production. The offer of personnel by [] of DIA Production Center would be investigated. (Since the Executive Director, NPIC concurred in the use of DIA personnel, [] was asked for personnel. He indicated he would see what could be done.)

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